

**REMARKS**

Claims 1 - 18 are presented for reconsideration and further examination in view of the foregoing amendments and the following remarks.

In the outstanding Office action, the Examiner rejected claims 1 and 17 - 18 under 35 U.S.C. §102(b) as being anticipated by JP 7-90725 as translated by U.S. patent no. 6,303,095 to Nishimura et al. (hereinafter referred to as "the Nishimura et al. '095 reference"); and claims 1 - 18 was rejected under 35 U.S.C. 103(a) as being unpatentable over the Nishimura et al. '095 reference in view of U.S. patent no. 5,552,214 to Kobomura et al. (hereinafter referred to as "the Kobomura et al. reference").

After the foregoing amendment, claims 2 - 4, 7 - 8 and 10 - 18 are active in the present application. Claims 2, 14 and 17 have been amended. Claims 1, 5, 6 and 9 have been canceled. No new matter has been added by amendment within the meaning of 35 U.S.C. 132. As such, reconsideration and allowance of the application, as amended, are respectfully requested.

**Rejections Under 35 U.S.C. §102(b)**

The Examiner rejected claims 1, 17 and 18 under 35 U.S.C. §102(b) as being anticipated by JP 7-90725 as translated by the Nishimura et al. reference.

**Response**

Claims 1 and 17 - 18 have rejected under 35 U.S.C. §102(b) as being anticipated by JP 7-90725 as translated by the Nishimura et al. '095 reference. Applicants respectfully traverse the rejections.

For a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

The feature of the invention is that graphitized carbon fibers have a density of 2.20-2.26g/cm<sup>3</sup> and a thermal conductivity in an axial direction of the fiber of at least 400 W/mK. Accordingly, the carbon fibers may have well-developed graphite structure and an increased thermal conductivity in an axial direction of the fiber. See page 9, lines 1-11.

JP 7-90725 and the US counterpart, the Nishimura '095 reference, disclose milled carbon fiber and process for producing the same. The milled carbon fibers are obtained by a process comprising melt spinning of mesophase pitch, infusibilization,

milling of the infusibilized pitch fibers as obtained or after a primary heat treatment at low temperatures in an inert gas and a high-temperature heat treatment in an inert gas. However, JP '725 and the Nishimura '095 reference fail to disclose the claimed carbon fibers in which the graphitized carbon fibers have a density of 2.20-2.26g/cm<sup>3</sup> and a thermal conductivity in an axial direction of the fiber of at least 400 W/mK.

Accordingly, since all of the limitations of the claimed invention are not shown in the cited reference, Applicants respectfully request reconsideration and withdrawal of the rejections to claims 1, 17 and 18.

**Rejection Under 35 U.S.C. §103(a)**

The Examiner rejected claims 1 - 18 under 35 U.S.C. 103(a) as being unpatentable over JP 7-90725 as translated by the Nishimura et al. '095 reference in view of the Kobomura et al. '214 reference.

**Response**

Claims 1-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over JP 7-90725 as translated by the Nishimura et al. '095 reference in view of the Kobomura et al. '214 reference. Applicants respectfully traverse the rejections.

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or

suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

The composite materials of the present invention have the improved tensile strength and compressive strength. The Kobomura et al. '214 reference discloses unidirectional prepreg and carbon fiber reinforced composite materials comprising pitchbased carbon fibers and polyacrylonitrile-based carbon fibers. The Kobomura '214 reference fails to teach or suggest the claimed thermally conductive polymer composition and thermally conductive molded article.

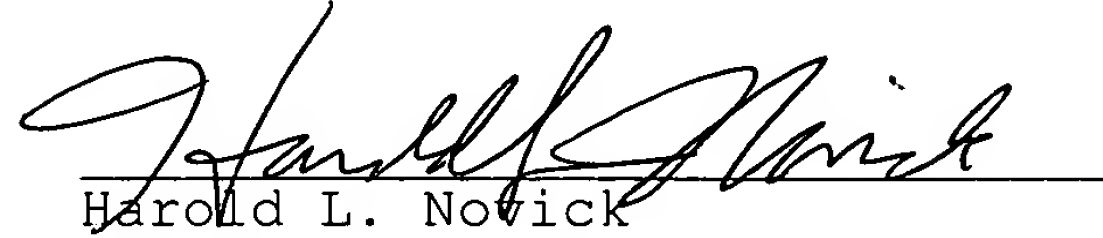
Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections.

#### **CONCLUSION**

In view of the foregoing amendment and remarks, it is respectfully submitted that the present application is in condition for allowance and such action is respectfully requested. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By:



Harold L. Novick

Registration No. 26,011

Derek Richmond

Registration No. 45,771

Marvin C. Berkowitz

Registration No. 47,421

Customer No. 20529

Date: November 24, 2001  
NATH & ASSOCIATES PLLC  
1030 Fifteenth Street, N.W.  
Sixth Floor  
Washington, DC 20005  
(202) 775-8383